AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. **(withdrawn)** An isolated 2-hydroxyisoflavanone dehydratase, comprising the amino acid sequence of SEQ ID NO: 1.

2. **(withdrawn)** The isolated 2-hydroxyisoflavanone dehydratase according to claim 1, wherein said 2-hydroxyisoflavanone dehydratase catalyzes a dehydration reaction of 2,7-dihydroxy-4'-methoxyisoflavanone or 2,5,7-trihydroxy-4'-methoxyisoflavanone to thereby generate formononetin or biochanin A.

3. **(withdrawn)** A polynucleotide, comprising:

a nucleotide sequence encoding the 2-hydroxyisoflavanone dehydratase according to claim 1; or

a nucleotide sequence complementary to the nucleotide sequence.

4. **(withdrawn)** A polynucleotide, which encodes a 2-hydroxyisoflavanone dehydratase consisting of the nucleic acid sequence of SEQ ID NO: 2.

5. **(withdrawn)** A polynucleotide, having 50% or more homology to a nucleotide sequence of SEQ ID NO: 2, and wherein said nucleotide encodes for a 2-hydroxyisoflavanone dehydratase.

6. **(withdrawn)** The polynucleotide according to claim 3, which is obtained by cloning from *Glycyrrhiza echinata*.

7. **(withdrawn)** A polynucleotide, which hybridizes at least part of a polynucleotide having a nucleotide sequence of SEQ ID NO: 2 or a nucleotide sequence complementary to the nucleotide sequence.

8. **(withdrawn)** A polynucleotide, which can function as a primer or a probe for a nucleotide sequence encoding a 2-hydroxyisoflavanone dehydratase or cDNA of the 2-hydroxyisoflavanone dehydratase, which can be hybridized with a successive sequence of at least 15 of SEQ ID NO: 2 or a polynucleotide complementary to the successive sequence.

9. **(withdrawn)** A 2-hydroxyisoflavanone dehydratase, encoded by the polynucleotide according to claim 3.

10. **(withdrawn)** A method of dehydrating a 2-hydroxyisoflavanone comprising dehydrating a 2-

hydroxyisoflavanone with a protein encoded by the polynucleotide according to claim 3.

11. (withdrawn) A method of producing an isoflavonoid comprising reacting at least flavanone, 2-hydroxyisoflavanone synthase (IFS), and a protein encoded by the polynucleotide according to claim 3.

12. (withdrawn) A vector, comprising the polynucleotide according to claim 3 inserted therein.

13. (withdrawn) A recombinant DNA or RNA, comprising an expression system from which the polynucleotide according to claim 3 can be expressed in a host cell.

14. (withdrawn) A host cell transformed by the vector according to claim 12.

15. (withdrawn) A transformed host cell according to claim 14, wherein the host cell comprises yeast.

16. (withdrawn) A host cell according to claim 14, wherein the host cell comprises a recombinant *E. coli* cell of Accession No: FERM BP-08662.

17. **(withdrawn)** A method of manufacturing 2-hydroxyisoflavanone dehydratase, comprising incubating the host cell according to claim 14, and isolating 2-hydroxyisoflavanone dehydratase.

18. **(withdrawn)** A method of producing isoflavonoid comprising producing said isoflavonoid with a host cell according to claim 14.

19. **(withdrawn)** A method of producing isoflavonoid comprising producing said isoflavonoid with a host cell transformed by the polynucleotide according to claim 3 and a polynucleotide encoding a 2-hydroxyisoflavanone synthase (IFS).

20. **(withdrawn)** A transgenic plant, comprising the polynucleotide according to claim 3 introduced therein.

21. **(withdrawn)** A transgenic plant according to claim 20, wherein the transgenic plant comprises a leguminous plant.

22. **(withdrawn)** A method of producing isoflavonoid comprising obtaining the plant according to claim 20 and isolating said isoflavonoid from said plant.

23. (withdrawn) A method of modifying isoflavonoid comprising modifying the isoflavonoid with a plant according to claim 20.

24. (currently amended) An isolated 2-hydroxyisoflavanone dehydratase, comprising the amino ~~acids~~ acid sequence of SEQ ID NO: 3 and having 2-hydroxyisoflavanone dehydratase activity.

25. (currently amended) ~~An~~ The isolated 2-hydroxyisoflavanone dehydratase according to claim 24, wherein said 2-hydroxyisoflavanone dehydratase catalyzes a dehydration reaction of 2,7,4'-trihydroxyisoflavanone or 2,5,7,4'-tetrahydroxyisoflavanone to ~~thereby generate~~ produce daidzein or genistein.

26. (withdrawn) A polynucleotide, comprising:

a nucleotide sequence encoding the 2-hydroxyisoflavanone dehydratase according to claim 24; or

a nucleotide sequence complementary to the nucleotide sequence.

27. (withdrawn) A polynucleotide, consisting of nucleotides 1-960 of SEQ ID NO: 4.

28. (withdrawn) A polynucleotide, having 50% or more homology to a nucleotide sequence comprising SEQ ID NO: 4, and wherein said polynucleotide encodes for a 2-hydroxyisoflavanone dehydratase.

29. (withdrawn) A polynucleotide according to claim 26, which is obtained by cloning from soybeans.

30. (withdrawn) A polynucleotide, which hybridizes at least part of a polynucleotide having a nucleotide sequence of SEQ ID NO: 4 or a nucleotide sequence complementary to the nucleotide sequence.

31. (withdrawn) A polynucleotide, which can function as a primer or a prove for a nucleotide sequence encoding a 2-hydroxyisoflavanone dehydratase or cDNA of the 2-hydroxyisoflavanone dehydratase, which can be hybridized with a successive sequence of at least 15 of SEQ ID NO: 4 or a polynucleotide complementary to the successive sequence.

32. (currently amended) An isolated 2-hydroxyisoflavanone dehydratase, encoded by the polynucleotide ~~according to claim 26.~~ comprising:

a nucleotide sequence encoding the 2-hydroxyisoflavanone dehydratase of claim 24 or a nucleotide sequence complementary thereto; or

a nucleotide sequence of SEQ ID NO: 4 or a nucleotide sequence complementary thereto,

wherein said 2-hydroxyisoflavanone dehydratase has 2-hydroxyisoflavanone dehydratase activity.

33. **(withdrawn)** A method of dehydrating a 2-hydroxyisoflavanone comprising dehydrating a 2-hydroxyisoflavanone with a protein encoded by the polynucleotide according to claim 26.

34. **(withdrawn)** A method of producing an isoflavonoid comprising reacting at least flavanone, 2-hydroxyisoflavanone synthase (IFS), and a protein encoded by the polynucleotide according to claim 26.

35. **(withdrawn)** A vector, comprising the polynucleotide according to claim 26 inserted therein.

36. **(withdrawn)** A recombinant DNA or RNA, comprising an expression system from which the polynucleotide according to claim 26 can be expressed in a host cell.

37. (withdrawn) A host cell transformed by the vector according to claim 35.

38. (withdrawn) A transformed host cell according to claim 37, wherein the host cell comprises yeast.

39. (withdrawn) A host cell according to claim 37, wherein the host cell comprises a recombinant *E. coli* cell of Accession No: FERM BP-08661.

40. (withdrawn) A host cell transformed by a vector where a polypeptide encoding a 2-hydroxyisoflavanone synthase (IFS) is inserted and a vector where the polynucleotide according to claim 26 is inserted.

41. (withdrawn) A transformed host cell according to claim 40, wherein the host cell comprises yeast.

42. (withdrawn) A host cell according to claim 41, wherein the host cell comprises a recombinant yeast *E. coli* cell of Accession No: FERM BP-08663.

43. (withdrawn) A method of manufacturing 2-hydroxyisoflavanone dehydratase, comprising incubating the host cell according to claim 37.

44. (withdrawn) A method of producing isoflavonoid comprising producing an isoflavonoid with the host cell according to claim 37.

45. (withdrawn) A transgenic plant, comprising the polynucleotide according to claim 26 introduced therein.

46. (withdrawn) A transgenic plant according to claim 45, wherein the transgenic plant comprises a leguminous plant.

47. (withdrawn) A method of producing isoflavonoid comprising obtaining the plant according to claim 45 and isolating said isoflavonoid from said plant.

48. (withdrawn) A method of modifying isoflavonoid comprising modifying said isoflavonoid with a plant according to claim 45.

49. (withdrawn) A polynucleotide, encoding an enzyme having a motif of carboxylesterase and catalyzing a dehydration reaction.

50. **(withdrawn)** A polynucleotide, encoding an enzyme having a motif of carboxylesterase and catalyzing a dehydration reaction of a 2-hydroxyisoflavanone.